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HEMORRHAGE IN EARLY PREGNANCY*

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Baltimore, Md.

Mr. President, and members of the Medical Society of Delaware: It gives me great pleasure to be here with you. I want to say that Maryland makes no claims as to age over you; we have been in existence only one hundred and twenty-five or thirty years, and we are still growing a little bit. We are going to have a meeting next week, by the way, to which I should like to invite you all; and to show that in Maryland we had some influence on medical education quite early, we are to hold the meeting at a little academy, and one of your own members is to speak, in which the two founders of the medical school of the University of Pennsylvania, Dr. Benjamin Rush and Dr. John Archer, the first medical man to receive a diploma in the United States, not to say later men like John B. Deaver and many others, were all educated, way back in the seventeen-forties. It will be a very delightful occasion and I not only bring you greetings from the Society of which I happen to be at this moment the President, but I invite you all to our semi-annual meeting next Wednesday.

I am never asked to address a state medical society without feeling that I should talk about something which is of intense and vital interest to a great number of people. I am going to change the title as it appears on the program, a little bit, and in place of talking about the very comprehensive title which you have there, I am going to ask your attention for just a little while to the early hemorrhages in pregnancy, particularly as to their differential diagnosis and the mistakes which might be made, and some of the results of the mistakes, and a few suggestions for treatment.

It has been my experience many times and has, no doubt, been the experience of many others engaged in obstetrical work to have been confused concerning diagnosis in the event of early bleeding in cases supposed to be pregnant. This has occurred oftenest, of course, in those cases in which, for one reason or another, the history is misleading or on which one has been called late, or in which various attempts at treatment have already been made, thereby complicating the picture. Or, confusion may arise from anatomical or pathological conditions of which the patient is unaware and which may help to mislead a practitioner or a consultant.

Hemorrhage in early pregnancy has an extensive etiology. There may be neoplasms, hydrorrhea gravidarum, cervical erosions, varices, ectopic gestation, abortion, and hydatidiform mole, some of which may make differential diagnosis difficult, and some of them making the diagnosis of pregnancy itself difficult. Some recollections of my earlier attempts to diagnose pregnancy complicating fibroids or ovarian tumors are still quite vivid. Now, however, we have aid that removes many of our difficulties by at least definitely establishing the fact of the pregnancy itself, such as the Zondek-Aschheim test.

The medical profession is much more interested in the commonest of the early bleedings—abortion—its incidence, etiology, diagnosis, particularly its differential diagnosis and treatment, and its differentiation, particularly from ectopic pregnancy and hydatidiform mole.

ABORTION

The incidence of this complication of pregnancy has been variously estimated, but it must certainly occur once in every two or three pregnancies. (Note 1) We are not so concerned about this tremendous percentage of early interruptions as we were before the early investigations of Maul and subsequent investigators, who showed us that a much greater percentage of them than we had supposed are due to imperfections of the embryo itself and that abortion in such cases is usually a fortunate occurrence.

The etiology of abortion is usually divided

*Read before the Medical Society of Delaware, Wilmington, October 14, 1931.

into foetal, maternal, and paternal. The foetal etiology depends upon the various conditions causing death of the foetus.

FOETAL:

Diseases of the chorion
Diseases of the placenta
Diseases of the amnion
Malformations
Acute infectious diseases
Chronic infectious diseases
  Syphilis
  Tuberculosis
Premature separation of the placenta (in nephritis)
Any of the toxemias of the mother
Occupational poisoning
Anaesthesia

MATERNAL:

All diseases of the uterus, especially endometritis and malposition.
All diseases accompanied by continued high temperature (Note 2)
Infections from the vagina
Syphilis—usually causes later abortions and premature labor
Traumatism or long-continued, or violent exercise or work (Note 3)

PATERNAL:

Syphilis
Tuberculosis
General paresis
Alcoholism
Occupational poisoning—(lead, phosphorus, etc.)

The great factors in premature labor are the toxemias, including nephritic toxemia, and syphilis.

Of the causes given above, and the list is not nearly so comprehensive as it might be, the commonest are

The malformation and death of the foetus,
Endometritis,
Malpositions of the uterus,
Acute infectious diseases of the mother,
Traumatism, or violent and prolonged exercise, and
Criminal practice.

In spontaneous abortion the general rule holds —that the exciting cause of abortion is efficient only in the presence of a predisposing cause. (Note 4) That is, given a malposition of the uterus or a chronic endometritis or a combination of the two, such an exciting cause as a dose of toxic drug or a mild traumatism may be entirely efficient, while it is nearly impossible to abort a perfectly healthy woman carrying a perfectly healthy foetus except by an actual attack on the foetus itself by the criminal abortionist.

In spontaneous abortion the hemorrhagic changes in the decidua are the immediate cause of the separation and expulsion of the foetus. When endometritis is present this pathological change is easily understood. Depending upon the completeness of the changes in the decidua an incomplete or a complete abortion results. Except in the presence of some unusual complication, the incomplete abortion usually in time becomes complete without operative interference. (Note 5)

My chief interest today is to speak of the differential diagnosis of conditions causing early hemorrhage and particularly of that between abortion, extra-uterine pregnancy, and hydatidiform mole. With the exception of some rather rare conditions, these furnish us nearly all of the early hemorrhages.

DIAGNOSIS

In all cases, of course, the fact of probable pregnancy must be established and it is well to remember that a woman who has menstruated regularly since puberty and who suddenly misses one or more menstrual periods, in the absence of profound anemia, is probably pregnant. The missing of a menstrual period in a woman who is irregular has no particular significance except that it is suggestive and again one must remember the Williams dictum, that *"the existence of an enlarged uterus at any time during the child-bearing period should be regarded as presumptive evidence of pregnancy until such a possibility has been conclusively eliminated."* (Note 6) While this is not a discussion of the diagnosis of pregnancy, one will be helped in difficult cases if he remembers that the early normal pregnant uterus is a movable, midline, cystic, compressible, symmetrical, globular tumor without tenderness, and which is just as large as the history of the supposed pregnancy would suggest; and that deviation from these criteria must be satisfactorily explained. On the other hand, it is well to remember that the tubal pregnancy or other ectopic furnishes, in most instances, a nearly or quite immovable, unilateral, non-cystic unsymmetrical tumor, always tender to touch and frequently exquisitely sensitive and painful. (Note 7) These facts, with proper attention to clinical symptoms and history (particularly history), go far toward establishing a correct diagnosis.

HYDATIDIFORM MOLE

In hydatidiform mole the evidence is not quite so clear. The diagnosis here is between abortion and hydatid. The uterus is usually large—not

necessarily so. (Note 8) Bleeding is more profuse, not so continuous as in abortion but usually more alarming. There may be frequently more pallor and the uterus, while not very painful, is somewhat tender. If, during the bleeding, the grapelike vesicles which are so characteristic of the condition are passed, which does not usually occur, the diagnosis is easy. We now know that the urine of a patient with hydatidiform mole contains very large quantities of anterior hypophyseal hormone so that we have a considerable diagnostic help in the quantitative urine analysis. A positive Zondek-Aschheim test can be obtained with as little as a 1/520 cc of urine.

The following chart gives the chief differential points in the diagnosis of the three conditions:

strual periods or cause inter-menstrual bleeding which may need operative interference.

Again, the extra-uterine which is terminated by early tubal abortion may cause so little disturbance that the real source of the trouble may be entirely overlooked. In these cases the history is the best guide. Even in the very mildest of these cases, however, the patient, if questioned closely, will usually reveal a mild and temporary faintness which with bimanual examination will usually reveal the seat of the trouble. In the severe cases of extra-uterine which rupture because of neglect often due to indifference or ignorance on the part of the patient, the pain, pallor, and all the symptoms of shock due to internal bleeding are well known and easily recognizable by all.

Differential Diagnostic Table

Abortion	*Extra Uterine Pregnancy*	*Hydatidiform Mole*
Hemorrhage fairly continuous and profuse	Hemorrhage slight externally (irregular)	Excessive hemorrhage
Pain follows hemorrhage	Pain precedes hemorrhage	No pain
Collapse and shock quite unusual	Collapse and shock frequent (particularly if rupture occurs)	Moderate to severe shock
Tumor movable without tenderness Midline Symmetrical Cystic Globular	Tumor fixed and very tender, usually unilateral Irregular Firm resistant No fixed outline	Tumor has same characteristics as normal pregnant uterus, except that it is usually larger
May occur at any time—3rd month most likely	Nearly always early—1st month	Occurs second to 3rd month or later
Parts of foetal structures may be expelled	Sometimes cast of uterine cavity expelled	Vesicles may be expelled

The foregoing diagnostic chart is, of course, subject to many variations. The very early abortion may cause such slight disturbance that the patient knows only that she has had a somewhat delayed menstruation and that the menstrual period has been a little more profuse than usual. There may be considerable bleeding without expulsion of the uterine contents and without further growth of the uterine tumor. In such cases, the so-called missed abortion with the development of the uterine mole occurs, which will usually later be removed at operation, or there may be enough of foetal remains to cause some disturbance in succeeding men-

Before leaving the matter of diagnosis of extra-uterine, I should like to call your attention to the fact that in most of the extra-uterine cases in which the foetus has continued to grow after the rupture, there is nearly always a history of an attack during the first or second month which was treated as a threatened miscarriage and the patient not operated. After the attack growth continues, the patient "feels life," and after an interval the movements cease, the patient has milk in her breasts, the tumor ceases to grow, and the group of symptoms which usually accompanies the carrying of a dead child. Or, possibly growth continues, foetal movements

continue to be felt, the foetal heart is heard, and the case progresses to full term and goes into spurious labor and after some hours, sometimes days, of what is called labor, the patient is examined, no cervix can be felt, uterus is found enlarged, usually anterior, fundus reaching to about the umbilicus, and the foetal mass posterior. The slide shows such a case.

The patient from whom the next slides were prepared gave a history of treatment for threatened abortion about fifteen months before these pictures were taken. She stated that she was quite sick for about ten days. You will note in the first picture the skeleton of foetus. At operation a tumor was removed which we show you on this slide. This tumor you will note looks like an ordinary ovarian cyst. The xray of the tumor, however, which you now see, reveals its contents and this is the photograph of the foetus itself. I show these pictures to demonstrate the necessity for careful examination of abortion cases which do not abort.

In cases of hydatid mole, there are a few which bleed at intervals for months but not enough to cause collapse. The uterus increases in size but a foetal heart is not heard, nor can foetal parts be outlined. Usually these, if neglected, are terminated spontaneously with severe bleeding and sometimes death. I recall an early case which was seen by a family physician, then by a gynecologist, then by myself, and then by a famous obstetrician, and the diagnosis missed by all of us, then returned to her physician in the country, who assured her she was undergoing a normal pregnancy. Fortunately, she again fell into the hands of the gynecologist who had first seen her and we were all present at the operation and were all somewhat embarrassed to see him remove an immense mass of hydatid mole.

I should like to say a brief word regarding treatment. In the matter of threatened abortion, if the abortion can be prevented the foetus is usually worth saving and the condition should be treated by rest and opium. The rest should be absolute—that is, the patient in bed, isolated, and the opium sufficient. No pelvic examination should be made as this will only help to turn a threatened abortion into an inevitable one. If the patient bleeds more or less continuously for several days, the abortion usually may not be prevented and the rest and opium treatment may as well be discontinued and the abortion be allowed to take its course. Packing of the uterus to expedite expulsion of contents, curettage, douches, are in the majority of cases meddlesome and dangerous obstetrics. There can be no objection in removing decomposing material from the vagina or cervix with the finger or ovum forceps, but more interference than this is usually unnecessary. It is particularly advisable to abstain from operative interference further than mentioned above in cases showing signs of infection. The elevation of the patient's bed, ice bags to the body, ergot are usually sufficient. It is usually the case that is treated too much that terminates fatally, while, as before mentioned, in the cases of so-called missed abortion in which interference must ultimately come, there is usually no hurry.

In extra-uterine pregnancy the rule "operate as soon as diagnosed" usually is right. This is also true in the case of hydatid mole. Any case which keeps on bleeding for days, or sometimes for weeks, at intervals and does not abort should always make one think of hydatid. In any event, such a case needs at least skilled interference. It should also be remembered that these cases are sometimes followed by chorio-epithelioma unless thoroughly and completely removed. Such cases should, of course, always be watched carefully for some months after delivery and the value of the Zondek-Aschheim test in the diagnosis of chorio-epithelioma should not be forgotten.

I have not discussed the bleeding which may occur because of new growths, the discharge because of hydrorrhea gravidarum, or the occasional case which menstruates for a month or two after the occurrence of pregnancy. I have preferred rather to call your attention to the two most common of the conditions causing early hemorrhage and the condition which furnishes the most puzzling of the early hemorrhages. You have noticed that I have not tried to bring you anything new nor anything which you have not already known but to recall to you facts that I find need to be recalled to the practitioner in medicine. I have seen many cases, some of which have been my own, when the neglect to apply the simple diagnostic criteria and prin-

ciples of treatment mentioned in this paper have caused needless morbidity and mortality.

What I want to call attention to is the fact that in these cases the differential diagnosis can as a rule be made. Of course, the danger is in the substitution of an abortion for an extra-uterine pregnancy, with all the dangers it entails. A slight bleeding with all the symptoms of extra-uterine pregnancy is very dangerous if allowed to go on, neglected by the patient herself or the doctor, until it ruptures, with all the conditions of shock and collapse and infection, and so forth, or the termination such as we saw here in both cases, neither died, both got well, but there was just luck in that.

The hydatid is a tremendously dangerous thing because it goes along and goes along and finally when the woman hasn't bled very badly but quite a bit, it will suddenly empty itself all at once and the bleeding may be so tremendous that it is impossible to get anything into the woman to save her from death.

Then another thing, in these cases of hydatid mole that you have afterwards, is a great responsibility in watching them to see that they do not develop into epithelioma, and any of these cases that show small tumor masses in the vagina or in any other part of the anatomy which are the least bit doubtful, should be carefully observed, but now with the Zondek-Aschheim test we can almost definitely diagnose them.

In the treatment, I want to say that the difficulty about these cases is that the fatal cases are, in the abortion cases, almost invariably those that are treated too much. I repeat they are almost invariably treated too much. The curet in the presence of infection should never go into a uterus, and not at all ordinarily. It is a very unusual case indeed in which you do it. Most of these cases are treated by the sitting position, ice bags, ergot, and will get well. The incomplete abortion becomes complete, and anything else, curets, douches, any operative interference with the exception of just the removal of the contents from the vagina, sometimes is meddlesome and dangerous obstetrics.

The diagnosis of the extra-uterine should be followed by immediate operation, and the hydatid mole by immediate removal and emptying of the uterus; and it is the neglect of these simple, very simple, criteria which I have endeavored to show that brings so many bad results in abortion and extra-uterine pregnancy.

Notes

Note 1. I wonder if even the medical profession appreciates the tremendous percentage of pregnancies that are terminated by miscarriage.

Note 2. In the old days when we were constantly having typhoid fever epidemics, I have one of my vivid recollections of delivering case after case of early abortion, or some time during pregnancy prematurely, because of continued high temperature of typhoid, and all of you are old enough to remember the flu epidemics.

Note 3. I think of all the conditions in which I have been called upon to treat threatened or actual miscarriage, the thing which has caused most of them has been moving. A woman gets ready to move. She is pregnant and she works for two or three weeks getting ready. She spends two or three days moving, and as she locks the outside door, she starts to miscarry. That is one of the commonest things. It happens very frequently.

Note 4. It means a healthy woman, healthy in all her genital organs, perfectly normal uterus and healthy child, a perfectly healthy woman carrying a perfectly healthy child cannot be aborted except by the rectal attack. You can throw her out of a window or off a horse, or upset her in a taxicab and she carries that child. It is nothing short of actual violence, attacking the foetus itself, which will abort her. The spontaneous abortion which is easy is invariably due to some predisposing cause.

Note 5. That is one of the impressions I should like to leave with you, that if you just let them alone—I don't mean entirely alone, but without operative interference—the so-called incomplete abortion properly handled will usually become complete without meddlesome obstetrics.

Note 6. That is a thing that one must never forget, no matter what story is told, nor what the condition is, social or otherwise; one must never forget that fact.

Note 7. There can be no possible mistake about those when they are both typical.

Note 8. We usually say that with the hydatidiform mole it is larger than the history would indicate. It is not necessarily so.

DISCUSSION

DR. WILLARD SPRINGER (Wilmington): I am going to take a minute to quote old Dr. R. A. F. Penrose, Professor of Obstetrics at the University of Pennsylvania, when I was a student. Every year he used to get over this one thing: The worst time to have an abortion is before three months; after three months it is not so much trouble, and the reason for that is that before three months there is the maximum amount of adhesion and the minimum amount of expulsive power. Now that covers the whole ground.

DR. WILLIAM WERTENBAKER (Wilmington): I will second every word Dr. Rowland has to say, especially the clear, consistent, concise, systematic way in which he developed the diagnosis.

In regard to abdominal abortion, I myself did a version on one case and got a live child and it is still living. We recognized our mistake and operated at once, but she had already lost a great deal of blood. She also had been in the hospital eight weeks and refused operation before delivery. That I did not know when I first saw the case.

In regard to hydatidiform mole, one little incident which happened a number of years ago stands out in my mind as the best description of it. One of my colleagues called me to see this case, which was unusually large, and we thought there might be a concealed hemorrhage. We packed her with gauze and along about two o'clock in the morning I got a call and they said the girl had expelled the contents of the uterus, and I said, "What does it look like?", and the doctor said, "It looks like a damned tapioca pudding."

DR. J. W. BASTIAN (Wilmington): There is one little mistake I want to relate. It was a case where we were in doubt as to whether it was an extra-uterine pregnancy, and we introduced a probe and came to the conclusion it must be an extra-uterine pregnancy, and when we opened the woman up, she had a double uterus and was three or four months pregnant.

DR. WALTER W. ELLIS (Delaware City): I should like to take just one moment, gentlemen, though I know it is late. I had quite an experience in extra-uterine pregnancy in my first year of practice. I had six cases of extra-uterine pregnancy. All, if I remember correctly, were tubal pregnancies, and all were operated on early and made good recoveries.

About the beginning of the second year, one morning I was called to see a case, and I was looking for extra-uterine pregnancy at that time and made a diagnosis of tubal pregnancy, a provisional diagnosis, and suggested that she go to the hospital immediately, and I took her myself and left her at the hospital. She had a flat abdomen and was not in shock. She had a slight hemorrhage, and the surgeon decided after seeing her that he would wait and assure himself as to whether it was ectopic pregnancy. That was between one and two o'clock in the afternoon, and at two o'clock that night I was notified that this patient had an enormous abdomen, she was in shock, and they were going to operate immediately, which they did before I could get to the hospital. I knew I couldn't get to the hospital before they would operate, and it was two o'clock in the morning, so I didn't get up. She died I think on the operating table, or about at the end of the operation, showing a tubal pregnancy in each side, both of which had ruptured. I think that was twenty-five years ago, and I have had only three extra-uterine pregnancies since then, but that particular case was the seventh.

The Baer Maggot Treatment of Osteomyelitis: Preliminary Report of Twenty-six Cases

EDWARD HARLAN WILSON, CHARLES A. DOAN and DAVID F. MILLER, Columbus, Ohio (*Journal A. M. A.*, April 2, 1932), report that twenty-two of twenty-six children and adult patients, with either acute or chronic osteomyelitis, have been successfully treated with fly larvae during the past eighteen months in the university osteomyelitis clinics. The average healing time for all cases has been ten weeks; for those lesions occurring in children, seven weeks. The type of scar remaining is a distinct improvement in that there is an obliteration of the cavity occasioned by operation and the disease process through the ingrowth of healthy granulation tissue with at least partial restoration of the blood supply. The authors emphasize the fact that the best surgical judgment must always be exercised in the individual case and precede the after-treatment with fly larvae, if satisfactory results are to be obtained.

A NEW METHOD OF PERFORMING THE RADICAL CAESAREAN OPERATION*

William Wertenbaker, M. D.
Wilmington, Del.

Mr. President and Fellows of the Medical Society of Delaware:

Anything which I may say today concerning this operation, of necessity is largely a review or a revision, of my article on the subject which already has been submitted to *Annals of Surgery* (Extirpation of Pregnant Uterus at Full Term; *Annals of Surgery,* December, 1931.)

History. Although the first authentic abdominal Caesarean Section is accredited to Trautmann, of Wittenberg, in 1610, it is highly probable that the operation had been performed prior to that time; it is even possible that among primitive peoples it had been resorted to in emergencies. In the operation as then performed the uterine incision was not sutured, so that most of the mothers died of hemorrhage or infection, and naturally it was reserved as a last-resort measure.

In 1876 Porro suggested and carried out the procedure of amputating the body of the uterus, following removal of the foetus, and of fastening the cervical stump to the lower angle of the abdominal incision. The result was a decided lowering of the mortality rate, and his operation gained a certain vogue. Only a few years later, however, 1882, Sanger suggested his monumental improvement of suturing the uterine incision. With the general and rapid improvement of all surgical technique of this period, the results from the conservative or classical operation became so satisfactory that its field was greatly enlarged.

Introduction of the transperitoneal Caesarean Section, of which the de Lee operation is the most popular, was a still further advance and has largely superseded the Porro operation in neglected cases, although still leaving much to be desired. Where foreign growths exist or the uterus is already, or presumably, infected, the Porro operation is used and advocated in certain clinics. As it is usually carried out, however, we still do not avoid the possible contamination of the peritoneum as a result of the "spill," though we do remove an infected necrotic structure from the maternal organism. Consequently, in this class of cases the prognosis is unquestionably improved where we can avoid all possibility of direct contamination of the peritoneal structures.

Early in March, 1928, Dr. M. A. Tarumianz, of the Delaware State Hospital, at Farnhurst, called me in to aid in the solution of the following obstetrical problem presented by one of his inmates: Lilly S., colored, age 33 years, pregnant at or about term, hopelessly insane (general paresis), with a four-plus blood Wassermann reaction and a profuse cervical discharge which showed numerous gonococci. The foetal breech was lying in the right iliac fossa. She was the mother of six children, of whom only two were living, and both were mentally deficient. With the object in view of (1) delivering the foetus, (2) avoiding the spread of infection, and (3) sterilizing the mother, it was decided to remove the entire uterus and its contents before rupture of the membranes.

On March 15, 1928, at the Delaware State Hospital, the abdomen was incised in the lower midline, the broad ligaments clamped on each side and incised down to the level of the cervix, two clamps of sufficient length were placed entirely across the cervix, and the uterus was delivered from the abdomen. The cervix was then severed between the two clamps; the uterus, with its contents, was removed and passed to an assistant, who delivered a living foetus weighing seven pounds, two ounces. The cervical stump was cauterized and turned in, the stumps of the round and infudibulos-pelvic ligaments brought down and sutured to it. The utero-vesical fold of the peritoneum was then sutured over all to complete the peritoneal toilet; one cigarette drain was placed in the cul-de-sac, and the abdomen closed in three layers. This woman made an uneventful surgical recovery.

Since that time, for various indications, this procedure has been carried out on six other cases. All seven of these mothers survived, and all seven babies were delivered alive; two, however, died a few days after delivery from causes in no way attributable to the operation.

Indications. The use of this operation is suggested only for those cases where classical Caesarean Section would be followed by hysterec-

*Read before the Medical Society of Delaware, Wilmington, October 13, 1931.

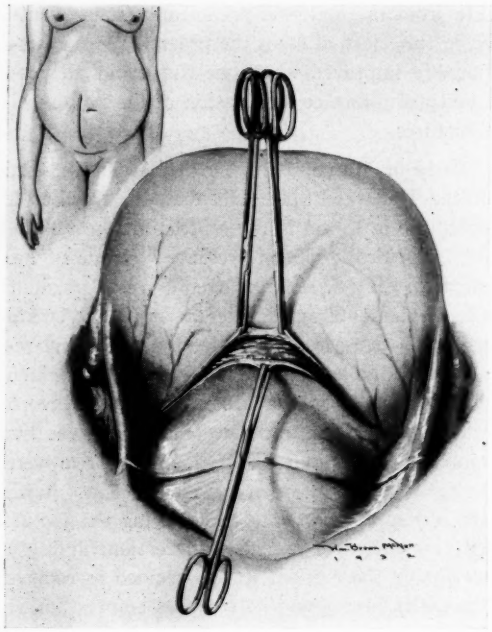

FIG. 1
Reflection of utero-vesical peritoneum and bladder.

tomy (the Porro operation and its modifications):

1. Where extirpation of the uterus would be otherwise indicated, as in the case of co-existing foreign growths.
2. Where it is of primary and vital importance to avoid contamination of the abdomen.
3. Where it is deemed best to terminate the reproductive function of the woman.
4. Where it is imperative to obviate all possible blood loss, as in certain types of placenta previa.

Contra-Indication. The operation is not recommended where the conservation of the reproductive function is to be desired and is feasible.

Operative Technique. The operative procedure is as follows:

1. Low median incision of the abdomen.
2. Careful and complete freeing of any adhesions which may exist.
3. Reflexion of the utero-vesical peritoneum and bladder.
4. Application of clamps to the broad ligaments, down to, but not including, the uterine arteries.
5. Severing of the broad ligaments.

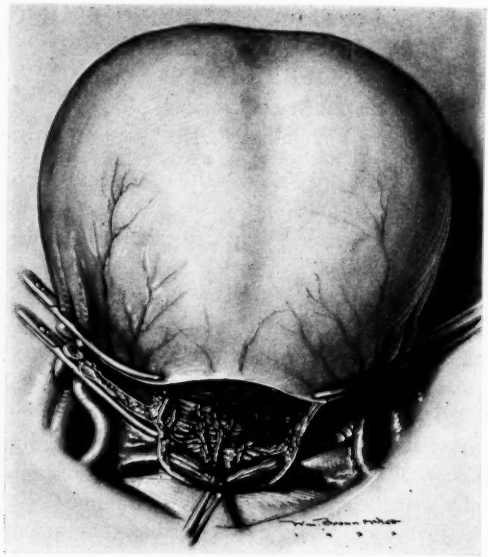

FIG. 2
Broad ligaments clamped, and severed on the right.

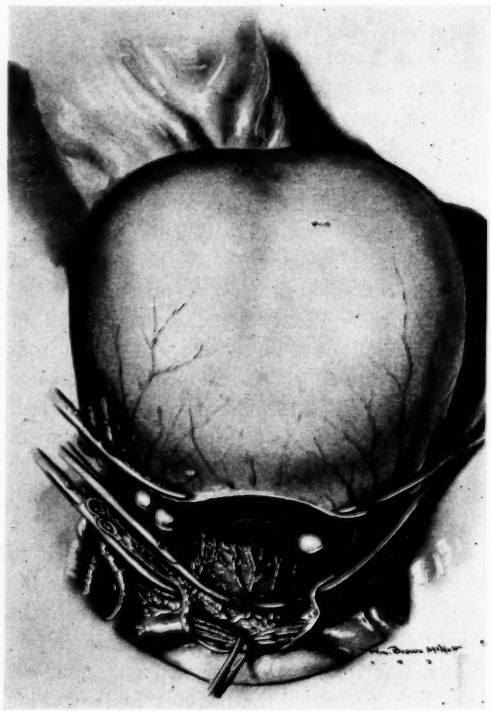

FIG. 3
Applying first clamp to cervix. Note position of left forearm and fingers which have "milked" the foetus towards the fundus, and are compressing the cervix transversely.

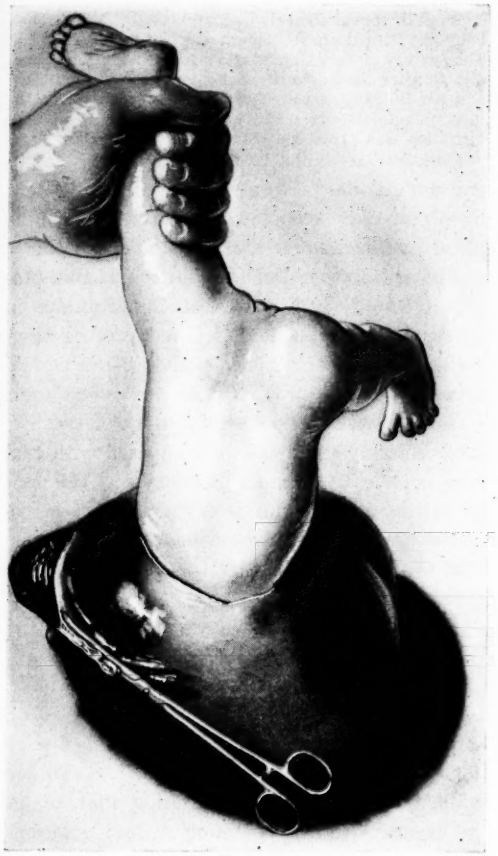

FIG. 4
Uterus lying on table; foetus being extracted by assistant.

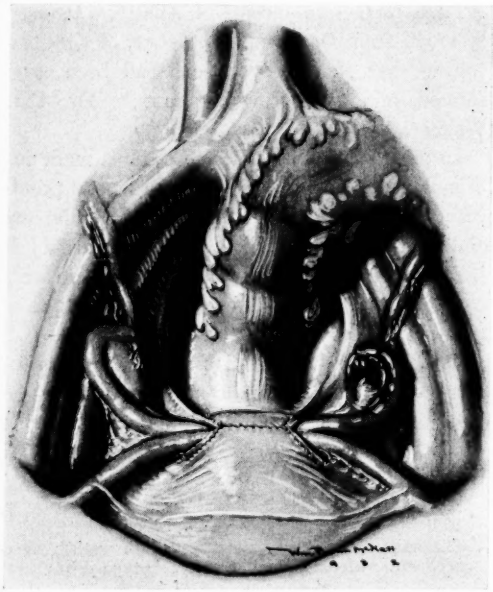

FIG. 6
Peritoneal toilet completed.

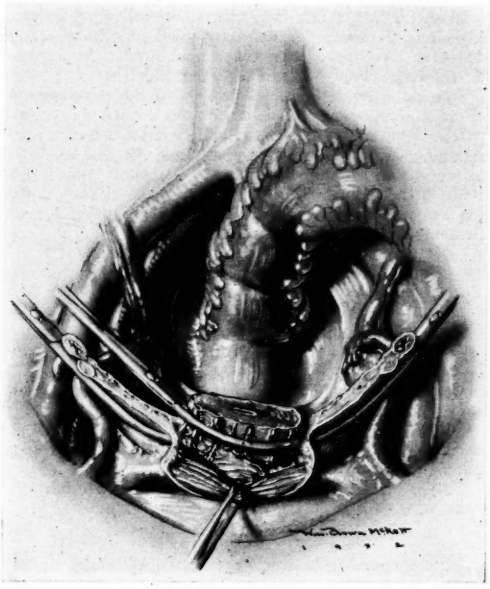

FIG. 5
Appearance of pelvis after removal of uterus.

6. Delivery of the uterus from the abdomen.
7. Application of clamps to the cervix.
8. Severing of the cervix.
9. Passage of the uterus and its contents to an assistant (who immediately extracts the infant).
10. Ligation of the broad ligaments.
11. Suture of the cervical stump and ligation of the uterine arteries.
12. Suture of pedicles to the cervical stump.
13. Suture of the utero-vesical peritoneum over the raw area.
14. Drainage of the cul-de-sac.
15. Closure of the abdominal incision.

CASE I

Mrs. Lilly S., colored. Chester, Pa.
Age 33 years. Para VII.
Referred by Dr. M. A. Tarumianz.

Diagnosis: Term pregnancy; oblique position of foetus; lues; gonorrheal cervicitis; general paresis.

Operation: March 15, 1928; Hysterectomy-Caesarean. Anesthesia, ether.

Infant: Male; condition, good; weight, 7 pounds, 2 ounces. Referred to Children's Bureau on March 17, 1928, apparently in good condition.

Surgical convalescence: Uncomplicated.

CASE II

Mrs. Alice G. Penn's Grove, N. J.
Age, 21 years. Para III.
Referred by Dr. R. B. Jarrett.

Diagnosis: Pregnancy at thirty-sixth week; two previous Caesarean sections (1926 and 1928); weakening uterine cicatrix; pelvic adhesions.

Operation: July 19, 1930; Hysterectomy-Caesarean. Anesthesia, gas-ether.

Infant: Female, fair condition upon delivery; weight, 6 pounds, 2 ounces. This infant died nine hours after delivery. Autopsy: interstitial pneumonia: hyperplastic thymus: cloudy swelling of the kidneys.

Surgical convalescence: Complicated by development of an abdomino-vesical fistula on the eighth day. Apparent spontaneous closure after ten days' use of a self-retaining catheter. Mother discharged August 16, 1930, in good condition. Returned to hospital August 26, 1930, after reopening of fistula: surgical closure under gas anesthesia on August 27, 1930. Final discharge on September 13, 1930, in good condition.

CASE III

Mrs. Martha W. Millington, Md.
Age, 27 years. Para V.
Referred by Dr. Merritt Brice.

Diagnosis: Pregnancy at thirtieth week; free uterine hemorrhage; full placenta previa.

Operation: December 20, 1930, Hysterectomy-Caesarean. Anesthesia, gas.

Infant: Male, living, but premature; weight, not recorded. This infant died in sixty-two hours. Autopsy: patent foramen ovale; prematurity.

Surgical convalescence: Uncomplicated. Mother discharged on fifteenth day, in good condition.

CASE IV

Mrs. Carrie M. Wilmington, Del.
Age, 35 years. Para I.
Referred by Dr. B. J. McEntee.

Diagnosis: Hyperthyroidism, uterine fibroids, term pregnancy.

Operation: January 8, 1931, Hysterectomy-Caesarean. Anesthesia, gas.

Infant: Female, condition good; weight, 6 pounds, 12½ ounces.

Surgical convalescence: Uncomplicated. Mother and baby discharged in good condition, on sixteenth day.

CASE V

Mrs. Hazel P. New Castle, Del.
Age, 29 years. Para II.
Referred by Dr. Lewis Booker.

Diagnosis: Term pregnancy; contracted pelvis; previous Caesarean section; pelvic adhesions.

Operation: February 18, 1931, Hysterectomy-Caesarean. Anesthesia, spinal.

Infant: Female; condition, good; weight, 8 pounds, 8 ounces.

Surgical convalescence: Uncomplicated. Mother and baby discharged on seventeenth day, in good condition.

CASE VI

Mrs. Victoria B. Wilmington, Del.
Age, 29 years. Para III.
Referred by Dr. N. W. Voss.

Diagnosis: Term pregnancy; contracted pelvis; two previous Caesarean sections.

Operation: April 3, 1931, Hysterectomy-Caesarean. Anesthesia, spinal.

Infant: Female, condition good; weight, 6 pounds, 1½ ounces.

Surgical convalescence: Uncomplicated. Mother and baby discharged on fourteenth day, in good condition.

CASE VII

Mrs. Marie W. Wilmington, Del.
Age, 26. Para II.
Referred by Dr. George W. Vaughan.

Diagnosis: Term pregnancy; previous Caesarean section; pelvic adhesions.

Operation: June 25, 1931; Hysterectomy-Caesarean. Anesthesia, spinal.

Infant: Female; condition, good; weight, 6 pounds, 3 ounces.

Surgical convalescence: Uncomplicated. Mother and baby discharged on fourteenth day, in good condition. This patient suffered an acute cardiac dilatation immediately after the administration of the spinal anesthetic, and her life was despaired of for a few moments. Within a minute, however, this crisis was passed, and the operation was proceeded with.

Conclusions. The facility with which the operation may be performed is largely dependent upon securing complete mobilization of the uterus before its delivery from the abdomen.

The rapid control of bleeding which this procedure affords gives it a distinct advantage in those mothers who have suffered profuse hemorrhage, which fact makes it advisable in certain types of placenta previa.

The convalescence in this group of mothers was remarkably smooth as compared with that from classical Caesarean Section, probably due to (a) the absence of a uterus undergoing necrotic changes, and (b) the avoidance of contamination of the peritoneum by the uterine contents, which unquestionably is a great potential source of danger to the patient.

Note. Since the publication of my article describing this operation in the December, 1931, issue of *Annals of Surgery*, I have received a letter (December 11, 1931) from Dr. J. S. Turberville, of Century, Florida, stating that he has performed a similar operation on four occasions, and enclosing reprints from the *Florida Medical Journal* of July, 1927, and December, 1929, giving an account of his work.

I am further in receipt of a letter (January 5, 1932) from Dr. Joseph B. deLee, of Chicago, stating that similar operations had been performed, and attributing the first to Dr. Carl Wagner, in 1896.

In presenting this report, no claim is made for originality in the technique, though several prominent consultants in New York, Philadelphia, and Baltimore assured me they had not heard of it before. At the time the above seven cases were operated on, however, I thought that the operation may possibly be an original one.

Since the reading of this paper before the Society, an eighth case has occurred, which, for the sake of reporting my series to date in full, is given below:

CASE VIII

Mrs. Louise S. Wilmington, Del.
Age, 39 years Para V.
Referred by Dr. Alfred L. Kelly.

Diagnosis: Pregnancy, post-term (46th week); oversized foetus; breech presentation; male type pelvis.

Operation: February 10, 1932; Hysterectomy-Caesarean. Anesthesia, spinal.

Infant: Male; condition, good; weight, 10 pounds, 6 ounces.

Surgical convalescence: Uncomplicated.

Mother and baby discharged on 15th day, in good condition.

Discussion

Dr. Lawrence Jones (Wilmington): I had a case, a primipara, that was obviously infected. She came into the hospital running a temperature of over 103, and great loss of blood, so that the patient was in pretty bad shape. I did not know the exact steps of Dr. Wertenbaker's operation, but it seemed to me that in that case it was a logical procedure, so I tried it out. That is the only one I have had occasion to do, and it worked out very nicely, except the child did not survive; I do not think it would have under any other circumstances. However, the mother got along very well.

Dr. Wertenbaker: I do not think I have anything to add, except to say that Dr. Jones was present at one of these operations, the last one, which had the complication with the spinal anesthesia. For a moment we did think our patient was dead.

Dr. Morris W. Vaux, of the Pennsylvania Hospital, writes that Dr. Mohler and he have performed this operation at the Philadelphia Lying-in Hospital, and were much pleased with it. They have many more calls than we can expect in our little institution, and I am delighted to see this operation done, if it is to be done at all, in a larger clinic.

SOCIAL INSURANCE

Edward H. Ochsner, M. D.
Chicago, Ill.

One of the very first questions that naturally arises is: Have any of our governmental agencies so conducted themselves in the past as to make it reasonably safe for us to entrust so stupendous a function as universal social insurance to any branch or department? I maintain that most of our local as well as state governments are inefficient or corrupt, and some are both.

Let any one who doubts the correctness of this statement spend a little time to look around with a critical eye and observe how most local governments, the various departments of the state in which he lives, and the departments of the Federal government are conducted, and I am convinced that he will find more inefficiency than he has ever dreamed could exist. If he does not personally know of corruption and inefficiency in government, let him but scan one single daily newspaper regularly for a month in order to be convinced. And what else can one expect who is at all familiar with politics as it has been played and managed in these United States in the year 1931—the manner in which most men secure their nominations and later their elections, and to whom they are beholden when they take office?

We have all seen the statement repeatedly in the public press, but have never seen it successfully refuted, that in many of the political subdivisions of our country only sixty per cent of the taxes collected are effectively spent, the remainder being frittered away, wasted or stolen. This inefficiency and corruption is due to many causes of which some of the more important are:

The fact that so far no formula has been discovered according to which the most efficient, honest, industrious and worthy members of the community can be secured for public office. Nor has there been any method devised whereby spoils politics, favoritism, pull, nepotism, waste and graft can be eliminated with even a reasonable degree of certainty. The individual who could solve these two problems would not only be the greatest benefactor of the human race, but the wisest man the world has so far produced. Plato tried to solve this problem twenty-three centuries ago when he wrote his Republic. For a time he actually thought he had found a solution. He prevailed upon the King of Syracuse to adopt his plan and put it into operation. The king tried it for a while, tired of it and sold Plato into slavery. Some good friends ransomed him. After that he was not so sure that his scheme would work in practice. Things are not much different today than they were in the time of Plato. Only worse. Worse because of the increase in population resulting in larger governmental units, the enormous increase in the number of those exercising the franchise, the increase in the percentage number of ignorant voters and the ever-increasing astuteness and finesse of our practical politicians.

Inefficiency and corruption are so common that we have become callous to it. We are annoyed by it, we grumble and complain mildly about it, we pay our ever mounting taxes if we have anything with which to pay and "let it go at that." It almost seems as though we humans had adopted David Harum's dog philosophy and were applying it to ourselves. He said:

"A certain amount of fleas is good for a dog, it keeps him from brooding on being a dog."

The best illustration of governmental muddling in general is to be found in the mess most governments of the world have made of themselves during the past twenty years. As examples, we need but call attention to the virtual bankruptcy of Germany and of Austria, the maladministration in Russia, the revolutions in Spain, China, Central and South America, the dictatorships in Poland and Italy and when we come nearer home, the general lawlessness in the United States, with its murders and kidnapping for ransom; conditions in the city of New York as disclosed by the Seabury investigation; the virtual bankruptcy of Chicago and Philadelphia, and the near bankruptcy of many other governmental units.

Let us study conditions in our own country a little more in detail in order to determine whether it would be wise, or even safe, to entrust the Federal, state and local governments or any one of them, with supervision over the private lives of its citizens.

The founders of our government subdivided it into three branches—the administrative, the legislative, and the judiciary. This was done on the theory that each had a distinct function to perform and that they would all act somewhat as checks and balances upon each other. This seemed logical at the time and undoubtedly has many advantages, but our founders did not and could not foresee one of its dangers and one of the abuses to which this division was to be put, namely, the practice of sidestepping duty and responsibility. One of the chief governmental in- and outdoor sports today is "passing the buck," with an "open season" the year round.

In a project involving as many problems as Social Insurance does, all the branches of the government would be involved in its execution—the administrative in administering it, the legislative in enacting the necessary laws, and the judiciary in adjudicating them. Let us then examine briefly how the different branches have deported themselves in the more recent past. Let us start by examining just one typical administrative activity of both the Federal and the state governments.

Individual members of the medical profession have repeatedly called attention to the great need of a careful study of all delinquents and criminals in our state and Federal institutions in order to determine the mental and physical condition of each member of these two classes with a view to their rehabilitation and possible reclamation and yet, almost nothing has been accomplished along these lines by governmental agencies. Dr. Frank L. Rector, who recently completed a survey under the auspices of the National Society for Penal Information on health and medical work in all state and Federal prisons and adult reformatories, states unequivocally that in not one of these institutions is there a well-rounded balanced medical and health program. While some of them provide acceptable accommodation for the care of the acutely sick or injured, there is little or no provision for the rehabilitation of the physically handicapped so that they will be better equipped for earning an honest living after their discharge to civilian life.

Just one typical example: On the day Dr. Rector visited the Ohio State Penitentiary, there were four thousand, four hundred seventy-five prisoners within its walls, of which one hundred fifty-six were hospitalized. There was but one physician on the staff, all other attendants at the hospital were prisoners. While the physician was nominally on a full-time basis he was carrying on an outside private practice as his salary from the state was insufficient to meet his living expenses. What can one part-time physician accomplish with that many patients, a large per cent of whom are physically handicapped, mentally abnormal and emotionally maladjusted? Ohio is a fair example. In most of the other penitentiaries and in the Federal prisons conditions are no better and in some even worse.

Now let us investigate some of the legislative problems. While nearly every legislative body contains some men of outstanding ability the great majority of legislators have not the slightest conception of what is required of their position and blindly follow their party bosses who are not generally known for their altruism, their

patriotism, or a burning desire to promote the public welfare. One of the worst features of our legislative activities is the fact that a small, well-organized and insistent minority can usually get its measures enacted into law unless some other group is adversely affected by the proposed legislation and makes a counter-attack.

Another bad method of securing legislation is the system of trading. An interesting occurrence of this sort happened in the State of Illinois in 1923. About that time a Chicago mayor was disgracing not only his city and state but the nation by the slogan, "Hit King George on the Snoot." A free citizen from the corn lands of the state decided that he would like to be sent to the state legislature, took up the battle cry, had just one plank in his platform, namely to make the American language the official language of the state. He was elected. By use of extensive vote trading he secured the passage of the following:

Official State Language

An act establishing the American language as the official language of the State of Illinois. (Approved June 19, 1923. L. 1923, p. 7). Preamble:

177. (American language). 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly: The official language of the State of Illinois shall be known hereafter as the "American" language.

We come now to what is probably the weakest spot in the government—the judicial interpretation of the laws and their legal administration. Some of the worst features in the administration of criminal justice in particular, in most of the states and sometimes even in the Federal courts, result from countless postponements, hair-splitting technicalities, innumerable appeals, and numerous reversals with its resultant delays and miscarriage of justice. Volumes could be written on this subject alone, but one illustration of each method of delaying justice will have to suffice.

A known gunman has been indicted six times in the last eighteen months. Every time he has been released on bonds he has been involved in new crimes. In spite of all this he was given thirty continuances on the first indictment. Commenting on this and many similar cases, Henry Barrett Chamberlin, operating director of the Chicago Crime Commission, recently made the following statement:

"Repeated postponements in the trial of a criminal case is the most serious obstacle in obtaining a just verdict."

The following is an illustration of how intense legalism and the glorification of technicalities only too often defeats justice. The case is taken from the decision of the Illinois Supreme Court Volume 258. This decision was handed down many years ago, but it still stands. An eleven-year-old girl was dragged into a basement apartment and mistreated by a fifty-year-old man. He was found guilty and sentenced to the penitentiary for five years. The Supreme Court reversed the sentence not because of any doubt concerning the defendant's guilt but because the child's first name had been set forth as Rosetta instead of Rosalia in the indictment.

In most major criminal cases in nearly all of the states of the union the convicted person has three and sometimes even more chances of appeal and one or two chances of executive clemency. Each time he has a chance to find a loophole and to make his escape while society is denied an equal chance to protect itself.

Our laws have been so emasculated by molly-coddle reformers that it is almost impossible to convict a criminal and keep him convicted or to convict one or a group of men who maladminister government departments. A case in point. Between the years 1915 and 1919, four real estate experts were paid $2,736,868.00, out of the city treasury. It was common knowledge that the payments were grossly excessive and that a good deal of this money ultimately found its way into the political fund of the administration and yet the Supreme Court reversed the verdict of the Circuit Court which had found the defendants guilty because it claimed that the prosecution had not proven that any member of the administrative body had personally received any of the money. To the laymen the language of the Supreme Court seems to say that if the administrative officer chooses to look in the other direction when the money is being stolen he cannot be held responsible. I do not presume to criticise the courts in these decisions, the fault may be in the laws, but no one will claim that all this spells governmental efficiency, and that is the point under discussion here. In this con-

nection I wish to quote a jurist who was known for his outstanding fearlessness and integrity and his profound knowledge of the law. He characterized the Municipal and Circuit Courts as the Courts of Original Error, the Appellate Courts as the Courts of Intermediate Speculation and the Supreme Court as the Court of Ultimate Conjecture.

While most of these illustrations have naturally been taken from Chicago and Illinois, similar instances in many other places prove that conditions are just as bad. We need but refer to the recent dismissal of five judges for gross inefficiency and corruption in New York City and to an address of Samuel Seabury to the justices of the Appellate division of the Supreme Court of New York in which he said, "It is for you to say whether the magistrates' courts shall be turned into bargain-counters where justice is bought and sold, when political leaders are brokers dealing in influence." In smaller governmental units the corruption and inefficiency is, of course, on a smaller scale but in many instances it is there just the same. One writer in a popular magazine sizes up the whole situation in the following words: "From Teapot Dome to our latest municipal court scandals we have seen enough of political and public malfeasance to believe almost anything of our law-makers, courts and public guardians."

We have devoted this much space to the discussion of governmental inefficiency because it is fundamental. If we have demonstrated that most governments are inefficient or corrupt and that some are both and that there is no likelihood of marked improvement in the immediate future, then we have proven that it would be unwise and unsafe to entrust so vital a function as the almost universal control of medical practice to governmental supervision and control. If one were to record all the evidence of inefficiency and corruption which occur in all the governmental units of this country in one year alone it would require volumes instead of a few short articles.

The purpose of these articles, however, is not so much to give detailed information as to arouse the allied professions of medicine and dentistry and through them the general public to the impending danger.

Books for Tired Eyes

Oculists, opticians, and physicians with patients who find time heavy on their hands because eyestrain prevents their enjoying good books, will welcome the knowledge that they can refer their patients to "Books for Tired Eyes," by Charlotte Matson, a list just published by the American Library Association and available at libraries.

"Books for Tired Eyes" lists only books in large print. It enables people to read with the least amount of fatigue and is especially valuable for people with defective eyesight. Even people with normal vision will find relaxation in the books recommended.

The books listed have been chosen with due regard for the differing tastes of readers. The titles are arranged under such subject headings as fiction, biography, travel, literature, history, books for young people, and books of general interest. A list of books in extra large type, called the "Clear Type Series" also included, makes reading easy even for those whose eyesight is unusually poor.

"Books for Tired Eyes" may be secured at most public libraries, or may be purchased directly from the American Library Association, 520 North Michigan Avenue, Chicago. 58 pages. Paper cover, 50 cents.

Vitamin A Research Award

Mead Johnson & Company announces an award of $15,000 to be given to the investigator or group of investigators producing the most conclusive research on the Vitamin A requirements of human beings.

Candidates for the award must be physicians or biochemists, residents of the United States or Canada who are not in the employ of any commercial house. Manuscripts must be accepted for publication before December 31st, 1934, by a recognized scientific journal. Investigations shall be essentially clinical in nature, although animal experimentation may be employed secondarily.

The Committee on Award will consist of eminent authorities who are not connected with Mead Johnson & Company, the names of whom will be announced later.

There are no restrictions regarding the source of Vitamin A employed in these investigations.

EDITORIAL

DELAWARE STATE MEDICAL JOURNAL

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Local news of possible interest to the medical profession, notes on removals, changes in address, births, deaths and weddings will be gratefully received.

All advertisements are received subject to the approval of the Council on Pharmacy and Chemistry of the American Medical Association.

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Subscription price: $2.00 per annum in advance. Single copies, 20 cents. Foreign countries: $2.50 per annum.

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The "Y" and the Doctors

The Young Men's Christian Association is a splendid institution, man-made, but with a noble purpose—the development of body, mind, and soul. That for the most part it is fulfilling its avowed mission is attested by the rather steady growth it has enjoyed, among persons of all or no creeds. But, being man-made, let us not blind ourselves to the fact that, while it has no Divine call to serve and makes no claims thereof, it does fall short, sometimes, of the high ideals one is led to expect from its moralistic preachments.

Various Centrals, including the Wilmington one, rent or lend their lecture halls to almost any old lecturer, faddist, or whatnot, with apparently few or no questions asked.

Take the food faddists as an example: Hundreds of poor dupes have been induced to follow bizarre, unnatural diets, with dire consequences to both physiology and purse, who first heard this slush from a Y. M. C. A. platform. To the legitimate practitioner of medicine this is a most serious indictment against the "Y," for no amount of quibbling about not being responsible for what renters say in their building can wipe out the fact that, being a semi-religious institution, its moral sponsorship for these alleged "lectures" is a fixed idea in the public mind. Justified or not, the great mass of the public has a general idea that all that is said from a "Y" platform is just about right. Such a great trust imposes an even greater responsibility. How, then, can the Y. M. C. A. managers square their consciences with such ridiculous propaganda as this?

SCIENCE'S GREATEST DISCOVERY
Hear J. D. Levine, D. P., lecture on
"THE HUMAN RADIO"

This is the most remarkable discovery of the age. It has been observed that the human eye is one of the most sensitive receiving stations we possess, and reveals 4 distinct types of men, women and children. Learn how you can tune in on your own conditions, and how you can determine some of the causes of your Baldness, Constipation, Pyorrhea, Nervousness, etc.

Brown-eyed people, for instance, should not eat the same as Blue or Grey-eyed individuals. Type No. 2 should not use lemons nor grapefruit. Type No. 4 must not drink anything hot. This is the first discovery of its kind registered by the U. S. Patent Office. Only one lecture at the Y. M. C. A. Tuesday, February 2nd, 8.15 P. M. Our Glands and our Abnormal Behavior. Demonstration after lecture—free clinic for children.

Dear Friend:

You'll be dead a long time—why not live Iriologically? Iriology is a science that reveals that there are four types of human beings and each type must be fed and treated differently. The Science of Iriology reveals that all other methods of eating are faulty due to the fact that it is not the chemicals in your food that is important, but the digestion of your food that actually counts.

We have discovered that certain people should not use lemons and grapefruit—others should not use vegetables—still others that should not use sweet milk. Levine who made this discovery will lecture and demonstrate this remarkable work at

the Y. M. C. A., Tuesday, February 2, 8.15 P. M. Demonstration after lecture. Free clinic for children. Admission free. Dr. A. Williams.

Strange as it may seem, there *are* human beings so low down in the intellectual scale as to believe this rot, dished up to the people of this, the richest city in the world, from a Y. M. C. A. platform! The possible effects upon the public of such "lectures" make one shudder.

We did not have time, after receiving the above two post-card advertisements, to check up on "Dr. A. Williams," but we did inquire about this "J. D. Levine, D. P." (What in the world is a D. P.?), and the Bureau of Investigation of the A. M. A. has this to say about him:

Jacob D. Levine, who used to spell his name without the final "e," is not a physician, although he sometimes prefixes his name with "Dr." He claims to be a "Doctor of Dietetics, Chiropractic, Hydrotherapy, Phototherapy, Electrotherapy, Spondylotherapy, Orificialtherapy, Psychotherapy, Iriology." His main line of quackery is "Iriology," by which he claims to be able to diagnose all diseases by looking at the iris. Iriology is, of course, a preposterous piece of buncombe.

The Chicago *Tribune* for February 22, 1923, contained a news item to the effect that Levine had been found guilty by a jury in Judge Asa G. Adams' court of practicing medicine without a license. The complaining witness in this case is said to have testified that Levine "massaged her spine so severely as to crush a rib."

Jacob D. Levine seems to have connected with him one Bessie Levine, who also calls herself "Dr." This woman, who is claimed to be the sister of Jacob D., seems to conduct the so-called Levine Health Institute with her brother. There has also been connected with the concern one A. Watten, whose name is also prefixed by the title "Dr." None of these individuals, so far as we can find, is a graduate in medicine or licensed to practice medicine in any state in the Union.

We believe "Dr. A. Williams" is the same individual as "A. Watten" above. The evidence here, as in many other similar fakes, shows that these gentry frequently have occasion to change their names: they would rather not be traced too closely. And yet this is the brand of imposter that comes before the Wilmington public with the quasi-endorsement of our Y. M. C. A.

Just to show that our local institution did not, in the above case, get "stung" for only one set of quacks, an accident which might happen, *once*, to any management, the Wilmington *Every Evening* for November 7, 1931, reported as follows:

SAYS PROPER FOODS WILL CURE AILMENTS

Foods that build up the needed amount of alkilinity of the body taken in the right proportions and combinations will help cure every ailment, declared Dr. William Hammond Hay, director of the Sun Diet Sanatorium, East Aurora, N. Y., speaking last night in the Y. M. C. A. at a public meeting sponsored by the Hauser Club.

Dr. Hay, who is the well-known author of books on dietetics, stated that the responsibility of a deficient alkilinity in the body is the cause of disease. This condition of the body may be overcome by correct nutrition, he went on.

The chemical composition of foods is of paramount importance, Dr. Hay said, and a person who neglects this fact will sooner or later be overcome by disease when his system is weakened by improper foods.

Lewis Collison presided at the meeting.

We are not sure that "Dr. William Hammond Hay" is a legitimate doctor at all. The A. M. A. Directory lists a Dr. William Howard Hay, of Buffalo, who graduated in 1891 from the New York University. The Lewis (Louis) Collison who presided at this meeting is the vice-president of the "Natural Food Center, Inc.," in Wilmington, whose advertisement in a 1931 issue of the local telephone directory appeared as follows:

FOOD FOR THOUGHT!

By Louis H. Collison

Health is natural. Disease is ignorance. Your stomach shouldn't be a garbage can—it is Nature's most remarkable laboratory, so, learn the difference between Natural Foods and the denatured junk usually eaten. Refuse to eat white flour products, white sugar, white rice, and other killers.

"Man does not die, he kills himself"—Seneca.

Our high death rate of 45 years is disgraceful—of every three children, one is undernourished, (overfed on adenoid-forming trash, but starved for real food.) Dr. Earl Broadbent, of our Consultation Dept., explains these facts without charge.

VITAL INFORMATION FREE

Most doctors are as unwell and die as young as other people; they cut out your tonsils, appendix, etc., poison your blood with vaccines, "anti-toxins," and serums, and prescribe harmful palliatives because of their ignorance of Natural Law.

We prepay orders of $3.00 throughout Del. and Eastern Shore. Free catalog. Free daily city delivery. Foods, Graters, Grinders, Books, Nut-Shellers, Health-Courses, Sieves.

THE NATURAL FOOD CENTRE

913 Orange St. Wilmington, Del

"A Whole Food Institution"

Telephone Wilmington 2-5896

Finally, the "Hauser Club" referred to is a memorial of the "lectures" delivered here on November 17, 18, and 19, 1930, by "Benjamin Gayelord Hauser, the eminent young Viennese Food Scientist," a quack exposed in some detail in THE JOURNAL last year (February, 1931, editorial, page 28), wherein it was also made plain by the Bureau of Investigation that there is no

record of any Earl Broadbent ever having been graduated from any reputable medical school or being licensed to practice medicine in any state in the Union.

We conclude: the Y. M. C. A. seems to have permitted its public platforms to be used by propagandists for some indescribably silly and sometimes dangerous pronouncements. The management owes it to itself, as well as to the public that admires and respects it, to check up in the department responsible in this matter. Let us hope that no longer shall such vapid mouthings as cited above be heard from a Y. M. C. A. platform.

EDITORIAL NOTES

Dear Doctor:

The Journal and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in The Journal, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages, but if they are not, we urge you to ask The Journal about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want The Journal to serve *you*.

With only a rare exception, the flood of questionnaires pouring in on the medical profession might be termed either political or propagandistic. Our advice is to ignore them, all and sundry, unless you feel a dominant urge to sign on the dotted line. This advice applies with particular emphasis to the questionnaire sent out by the National Anti-Vivisection Society, of Chicago, whose thirteen questions had better go into the waste basket, unanswered.

Believe it or not? Wet or dry? At any rate, we call attention to the fact that the *Literary Digest* prohibition poll, so far, shows that this country is against the present brand of prohibition, three to one. However, we still have some dry ostriches with us, who, burying their heads in the dry sands, insist that all is dry, even though their tail feathers are bathed in a 3:1 torrent. The psychologists tell us that some minds just never work; maybe that explains the ostriches.

Is Main Street still Main Street? After listening patiently for years to that old wheeze about "all the surgeons of America have been rated, and Dr. Whizit is the fourth finest in the country," we are now being regaled with the second edition, which has been amended to say: "There are only six surgeons in the United States, and two of these are in Wilmington, Dr. Tisit and Dr. Whizit." Verily, "the sun do move."

The Wilmington Chamber of Commerce is soliciting memberships from the doctors and lawyers. This *may* be a desirable thing for the doctors, but before rushing on to the dotted line give the Chamber an opportunity to explain why, (1) when they bring a new industry here, this corporation practice gravitates towards only two or three doctors; and why (2) when the leading members of the Chamber are ill, they take their "trade" to nearby medical centers, despite the competency of the local profession. When these questions are answered satisfactorily, the doctors of Wilmington may be more inclined to join the Chamber. Their remaining outside the fold is not peculiar to this community; it is seen everywhere.

The following letter, from the City Board of Health, needs no explanation:

Dear Doctor:

The Department of Health solicits your co-operation in the discouragement of the use of taxi-cabs for the transportation of persons suffering with communicable diseases to the Contagious Hospital.

This department feels that advice by the family physician against such a practice when called in communicable diseases would materially aid in the prevention of contact cases.

Your further co-operation through the early reporting of communicable diseases would aid this department in the instituting of immediate quarantine.

DELAWARE PHARMACEUTICAL SOCIETY

The Cornerstone

If it were possible to accurately gauge the public attitude to pharmacy and the drugs and medicines which the profession makes available, it is certain that the drug store would become a finer influence and a much more potent force in community affairs. In the public mind, there remains a certain deep-seated respect for the art of the pharmacist, and a rather definite ad-

miration for the man who has become proficient in this art. Much of the poetic glamour and fascination, so evident a short while ago, still abound. Pharmacy is an ancient calling. Its value has indeed been tried in the experience of those who have relied upon it. The drug store develops a peculiar sense of dependability and security. These attributes are intuitive and inherent in the public mind.

It is because of this public appreciation that the drug store stands a bit apart from its associates in the commercial field. The drug store represents an idea, a certain essential quality, a rather rare propensity not to be found in the mere buying and selling of goods. It represents a necessary aid in the fight for existence. It stands for a service which, in times of stress and storm, looms vastly above the marts of commerce and trade. Pharmacy, in its real and true sense, has a firm hold upon the imagination of the public mind. It begets confidence and trust, and in this lies its most priceless possession.

In all of this is to be found the real basis of the public duty which pharmacy owes. And in this too is to be found the personal and individual responsibility which pharmacists owe to the profession, to each other, and to the public. If this sense of public duty, this idea of personal responsibility could be made the cornerstone of the arch, rather than the stone rejected by the builders, many of the problems which now confront the pharmaceutical profession would cease to be problems at all.—*Md. Pharmacist,* October, 1931.

$715,000,000 Spent in U. S. Yearly for Medicines

The people of the United States spend $715,000,000 annually for drugs and medicines, which constitutes about 20 per cent of the national bill for sickness.

Of this amount $190,000,000 (26.6 per cent) is spent for medicines prescribed by physicians; $165,000,000 (23.1 per cent) for non-secret home remedies and $360,000,000 (50.3 per cent) for "patent medicines" of secret composition. These facts are brought out in a report just issued by the Committee on the Costs of Medical Care, of which Dr. Ray Lyman Wilbur is chairman.

This report, "The Costs of Medicines," published by the University of Chicago Press, discloses authentic figures on the drug industry in this country obtained through a three-year study on the subject made for the Committee on the Costs of Medical Care by Dr. R. P. Fischelis, vice-president of the American Pharmaceutical Association, and Dr. C. Rufus Rorem, formerly a staff member of the committee. In November this committee will issue its final report which will include recommendations based on its exhaustive five-year study into the problem of "the delivery of adequate, scientific medical service to all the people, rich and poor, at a cost which can be reasonably met by them in their respective stations in life."

U. S. Families Spend $22 Annually for Drugs

It was discovered that the average expenditure for medicines is approximately $22 annually per family of four persons or $5.50 per member. Actual expenditures per capita vary widely, however, and tend to be highest in the cities.

Other important facts this survey disclosed include the following:

1. Patients attempting to diagnose their own ailments by comparing their symptoms with those described in patent medicine advertisements may frequently forego proper medical attention until it is too late to effect a cure.

2. "Official" medicines can usually be purchased by the pharmacist for a fraction of the price of proprietary medicines or ethical specialties, with a corresponding reduction in price to the patient.

Merchandising Activities Make Registered Pharmacists Available

3. Provided they were engaged in no other pursuits, approximately 10,000 pharmacists could fill the 165,000,000 physicians' prescriptions now annually filled by 115,000 registered pharmacists in 60,000 drug stores. Limiting the compounding of prescriptions to 10,000 pharmacists in as many drug stores, however, would leave many communities without pharmacists, and in larger communities would spread the number of pharmacies, making it inconvenient for the public to obtain prompt prescription service.

Merchandising activities of drug stores, frequently derided, make the services of registered pharmacists available and more convenient to the public.

4. Although regulations governing the phar-

maceutical profession are strict enough, the privileges of unlicensed persons operating outside of pharmacy are so extensive that the public enjoys little protection in the sales of packaged medicines.

5. While self-medication is increasing, there is not available sufficient information on which the public can base its judgment as to what type of medicine may safely be used for the treatment of simple and minor conditions.

$1.50 Per Capita Annually Expended Through Doctors

6. Drugs prescribed or dispensed through doctors do not constitute a large portion of the total costs of medical care. Physicians' prescriptions plus the drugs dispensed in doctors' offices average approximately $1.50 per person per year.

"It is significant," the report reads, "that the costs of medicines to patients are still lower when the conditions of treatment permit a physician to prescribe only such medicines as he considers necessary to good results." Such conditions exist, according to the report, where medical service is rendered on an "annual" rather than a fee basis, as in industrial or university health services.

Millions Wasted on Patent Medicines

Few of the so-called "patent medicines" are actually registered as to ingredients and granted patents from the United States Patent Office. Most of them are protected by trade names which become, through registration and usage, the property of the manufacturer or distributor. The formulas are secret.

The report states that "so long as secrecy of composition is permissible for medicines offered for self-medication, and so long as the public is kept in ignorance of the proper uses and value of common drugs, the quack will find some method to ply his trade."

Expenditures for fraudulent cures range from $15,000,000 upward each year.

Recommendations Made for Future of Pharmacy

The authors made four recommendations based on their survey for the Committee on the Costs of Medical Care. They are:

1. Secret-formula drugs and medicines should be abolished through the compulsory disclosure on the label of the kind and quantity of medicinal ingredients. Those developing new and distinct preparations should be financially protected by appropriate privileges granted by a disinterested agency.

2. All manufacturers of drugs and medicines should be required to operate under annual licenses to be granted by the Federal government upon the fulfillment of satisfactory conditions with regard to competency of personnel, equipment and sanitary surroundings, and standardization of finished products.

3. Agencies should be established to prepare and disseminate accurate information concerning the proper use of home remedies appropriate for self-medication, with the aid of a committee of physicians and pharmacists of unquestioned reputation and standing. Universal and unnecessary use of self-prescribed medicine should be rigorously discouraged.

4. Professional knowledge of pharmacists should be used more adequately by reducing physicians' reliance on branded products; by permitting pharmacists to instruct drug store customers in proper use of medicines purchased for self-medication, but not to the extent of diagnosing ailments or recommending medicines; by the pharmacist distributing information dealing with medicines and hygiene, prepared by health departments; and by supplying information to the public concerning physicians and hospitals on the basis of data provided by local medical or hospital associations.

WOMAN'S AUXILIARY

to the

AMERICAN MEDICAL ASSOCIATION

Tenth Annual Meeting, New Orleans, May 9-13, 1932

All women attending the Convention, whether Auxiliary members or not, are invited to participate in this entire program.

Headquarters: Jerusalem Temple, 1137 St. Charles Ave.

Preliminary Program

Monday, May 9, 1932

6.00 P. M.—National Board Dinner and Pre-Convention Meeting for Board Members only, Orleans Club. Tickets $1.50.

Tuesday, May 10, 1932

9.00 A. M.—General Meeting, Jerusalem Temple. Mrs. Arthur B. McGlothlan presiding.

12.30 P. M.—Buffet Luncheon, Jerusalem Temple. Tickets $1.00.

2.00 P. M.—Walk through Vieux Carre with guides, starting from the Patio Royale.

4.00 P. M.—Tea, Patio Royale.

8.00 P. M.—General Meeting of the American Medical Association, Auditorium.

Wednesday, May 11, 1932

9.00 A. M.—General Meeting, Jerusalem Temple. Mrs. Arthur B. McGlothlan presiding.

12.30 P. M.—*Auxiliary Luncheon, Southern Yacht Club, 12 minutes from Canal Street or Jerusalem Temple. Luncheon tickets, $1.50; transportation, 25 cents.

2.30 P. M.—Post-Convention Board Meeting, Southern Yacht Club.

2.30 P. M.—*Through Garden Gates; glimpses of New Orleans.

4.00 P. M.—Teas in private residences.

NEW ORLEANS COUNTRY CLUB

8 P. M.

Divertissements in the Garden.

Buffet Supper.

Negro Spirituals (Courtesy of the Woman's Auxiliary to the Louisiana State Medical Society.)

Thursday, May 12, 1932

9.00 A. M.—General Meeting, Jerusalem Temple. Mrs. Walter Jackson Freeman presiding.

10.00 to 10.50, 11.00 to 11.50—Special Round Table Conferences, Jerusalem Temple.

12.00 M.—Buffet Luncheon, Jerusalem Temple. Tickets $1.00.

1.00 P. M.—*Trip to Oak Alley Plantation, visiting Spillway, returning 6 P. M. Round trip, $2.00 per person.

Or 2.00 P. M.—*Round Trip over Lake Pontchartrain via New Bridges. $2.00 per person.

Or 2.30 P. M.—*Trip to Versailles Plantation, Battle Field of New Orleans; docks and wharves. Round trip, $1.00 per person.

Or 2.30 P. M.—*Delgado Museum and City Park—Newcomb Art School and Audubon Park. Round trip, $1.00 per person.

Or 2.30 P. M.—*Mayan Exhibit, Tulane University. Transportation, round trip, 25 cents.

9.00 P. M.—President's Reception and Ball, Auditorium.

Friday, May 13, 1932

9.00 A. M.—*Trip to Gulf Coast, returning at 6.00 P. M. (Train leaves L. and N. Station at 9.00 A. M. Cost of trip, including beautiful scenic motor drive, luncheon, and return trip to New Orleans, $6 per person).

10.00 A. M.—Golf Tournament, Metairie Golf Club. Mrs. Joseph Hume, general chairman.

Mrs. Joseph C. Menendez, chairman of hotel committee.

Mrs. John E. Musser will extend welcome on behalf of Orleans Parish Auxiliary, and the response will be made by Mrs. Robert W. Tomlinson, of Wilmington, who is the president of the Delaware Auxiliary and Fourth Vice-President of the National Auxiliary.

*All trips start from Jerusalem Temple. Bus transportation paid for by individuals.

MISCELLANEOUS

DELAWARE STATE MEDICAL JOURNAL

Financial Statement

From January 1, 1931, to December 31, 1931

RECEIPTS

Operating:		
Subscriptions:		
Medical Society	$346.00	
Other	42.00	$388.00
Advertisements:		
Space, 1931	2,589.44	
Rebate, A. M. A.	164.85	
Copies	3.00	2,757.29
Non-Operating		00.00
Total		$3,145.29

DISBURSEMENTS:

Operating:		
Publishing, printing	$2,306.89	
Supplies	25.41	
Miscellaneous	115.84	$2,448.14
Non-Operating	00.00	00.00
Balance in Bank		697.15
Total		$3,145.29

For Three Years: 1929-1930-1931

	Receipts	Disbursements	Balances
1929	$2,850.07	$1,880.77	$ 969.30
1930	3,019.53	2,012.58	1,006.95
1931	3,145.29	2,448.14	697.15
	$9,014.89	$6,341.49	$2,673.40

Of this, $2,431.17 is in savings account, and $242.23 remains in checking account as of December 31, 1931.

Add to this $68.83 interest on savings account.

Official Call

To the Officers, Fellows and Members of the American Medical Association:

The eighty-third annual session of the American Medical Association will be held in New Orleans, May 9-13, 1932.

The House of Delegates will convene at 10 A. M. Monday, May 9. In the House the representation of the various constituent associations for 1932, 1933 and 1934 is as follows:

Delaware	1

The Scientific Assembly of the Association will open with the general meeting to be held at 8 P. M., Tuesday, May 10. The sections will meet Wednesday, Thursday and Friday, May 11, 12 and 13, at 9 A. M. and 2 P. M.

The Registration Department will be open from 8.30 A. M. until 5 P. M., Monday, Tuesday, Wednesday and Thursday, May 9, 10, 11 and 12, and from 8.30 A. M. to 12 noon, Friday, May 13.

E. STARR JUDD,
President

F. C. WARNSHUIS,
Speaker, House of Delegates

OLIN WEST,
Secretary

(Ed. Note—The complete programs and details can be found in the *Journal of the American Medical Association* for April 9, 1932, pages 1269 to 1304.)

Gastric Mucin in Treatment of Peptic Ulcer

Arthur J. Atkinson, Chicago (*Journal A. M. A.*, April 2, 1932), treated forty-three patients with history, signs, symptoms, laboratory evidence and roentgen manifestations of peptic ulcer with mucin. The patients were chosen because all the evidence concurred in the diagnosis. The therapeutic dosage of mucin totaled 90 Gm. a day, but three patients received as much as from 150 to 238 Gm. a day in a study of the effect on the gastric acidity. Ewald, fractional and motor test meals were given, and the stools examined for occult blood. The "acid test" as suggested by Palmer was used at first and later modified to coincide with Hardy's technic. The forty-three patients in the series became symptom-free within an average period of 1.7 days. The types of ulcers treated in the series are tabulated. The average duration of ulcer history, which was 5.2 years, indicates the marked chronicity of the ulcer diathesis in this group. Eighteen of the patients were awakened by pain suggesting gastric retention or continued secretion. Thirty-five of the patients in the series had previous medical management, spending a total of 208 weeks in hospitals, an average of 5.9 weeks per patient. All obtained relief on mucin with a total of twenty-five weeks of hospitalization, an average of 0.71 week per patient. Fifteen, having distress while on medical management when first seen, were continued ambulatory and obtained complete relief with mucin. Although any form of therapy may bring about a remission, there is no doubt that remarkable results have been obtained in patients who were previously having distress on dietary or alkali management. The time of observation has been too short to prove that the improvement is permanent in a disease in which the natural history is so variable. The author feels fully justified in believing that mucin treatment is conducive to healing.

The Dangers of Using Impure Mucin in Treatment of Peptic Ulcers

Andrew B. Rivers, Frances R. Vanzant and Hiram E. Essex, Rochester, Minn. (*Journal A. M. A.*, April 2, 1932), have demonstrated in certain specimens of commercial mucin the presence of large amounts of a secretagogue which by biologic tests seems to be histamine. The presence of this substance may be looked on as a contaminant which can be avoided if proper methods of preparation are used. Until a consistently standardized, pure product is supplied, it will be impossible to evaluate the therapeutic use of mucin.

Tularemia: Report of Case, With Postmortem Observation and Note on Staining of Bacterium Tularense in Tissue Section

Margaret Foulger, Alfred M. Glazer, and Lee Foshay, Cincinnati (*Journal A. M. A.*, March 19, 1932), report a case of tularemia in which: (*a*) auto-inoculation of two fingers of the left hand by contact with the primary lesion on the index finger seems to be highly probable; (*b*) the use of convalescent serum was without beneficial effects; (*c*) lesions of the peritoneum, both focal and diffuse, are described for the first time, and (*d*) a new staining method revealed the presence of Bacterium tularense in tissue sections from certain of the involved organs.

BOOK REVIEWS

Fertility and Sterility in Marriage. By Th. H. Van de Velde, M. D., formerly Director of the Gynecological Clinic, Haarlem, Holland. Pp. 448, with 20 plates. Cloth. Price, $7.50. New York: Covici-Friede, Incorporated, 1931.

This is the third volume of the author's trilogy on marital problems. The title is descriptive of the contents, and the book is divided into three major parts: I, ethical postulates; II, achievement of desired pregnancy; III, prevention of undesired conception. The whole volume reflects unusual scholarship and an almost encyclopedic knowledge of the literature, including the most recent researches. Being an European book, the bibliography contains only a small number of American references; the others are chiefly German. There are, however, too many references to the author's other books (especially to "Ideal Marriage"), wherein the present text is not sufficiently elaborated but refers the reader to the more complete text of the other volume. This defect should be corrected in the next edition. Part I, on Ethical Postulates, is a masterly presentation, and gives an exceptionally fine elucidation of the position of the Catholic Church on this subject, though the author is a Protestant. This is perhaps the most readable and scientific volume on this subject that we have yet seen.

Health Protection for the Preschool Child. White House Conference on Child Health and Protection. Pp. 275. Cloth. Price, $2.50. New York: Century Company, 1931.

The report is divided into four parts. The first deals with the general status of preventive measures for children over the country. The second part gives the results of a survey of the use of preventive medical and dental service for preschool children in 156 cities and in the rural areas of 42 states. The third part contains the detailed statistical tables giving data for each of the cities of the rural areas of states. The fourth part presents administrative features of the survey, and descriptions of methods and forms.

The value of periodic health examinations is stressed. Defects of one kind or another begin to show themselves during infancy and early childhood. It was found that a very large proportion of physicians made a practice of giving regular health examinations to most of their patients under one year of age. But after the first year this practice fell off very markedly. When the school age was reached, it was found that very few physicians made any health examinations. It was felt that a little more education of the parents, and physicians as well, is needed as to the importance of such examinations all through childhood.

Vaccination against smallpox and immunization against diphtheria were found of proven value as specific preventive measures. The object of the survey was to find out the number of children under six years of age (preschool children) who had received four universally recommended preventive health measures: . A health examination, a dental health examination, vaccination against smallpox, immunization against diphtheria.

The book contains a great deal of detailed information in an effort to give a true picture of the situation in both urban and rural areas. It is presented in a form which can readily be understood.

Body Mechanics, Education and Practice. White House Conference on Child Health and Protection. Cloth. Price, $1.50. New York: Century Company, 1932.

So far as public health is concerned, this book presents some very interesting and appalling data, and, inasmuch as the Sub-committee on Orthopedics and Body Mechanics have come to definite conclusions as to what has been accomplished, it is well worth reading by any intelligent layman or physician.

From statistics compiled by the army during the World War, and since then by physicians and physiotherapists in both public and private schools and colleges in different sections of the country, about eighty per cent of the population have been found to have poor body mechanics (a better term than poor posture, as the Committee points out). However, such a condition is largely correctable in school children, as was well proven by a study conducted in Chelsea, Mass. Unfortunately, at the present time very few people are interested in a problem which has for its aim the wholesale betterment of body mechanics, with its concomitant betterment of general health, mental activity, and aptitude in the growing child. Such a general improvement was noted in the properly controlled study at Chelsea, Mass.

The book is made up of a general discussion of the problem; the future problem—that of education and persuasion of the school authorities, and the general establishment of special instruction in the schools; the findings in full, in the appendix, of the Chelsea survey; and, in a second appendix, the exercises that were given in this survey and that should be taught in all grade schools.

Nutrition. White House Conference on Child Health and Protection. Pp. 532. Cloth. Price, $4.00. New York: The Century Company, 1932.

The Committee on Nutrition under the chairmanship of Kenneth D. Blackfan, M. D., made an exhaustive study of twenty-two separate topics, among them: Appraisal of the National Food Supply, The Vitamin B. Complex, The Pathology of Vitamin Deficiencies, Iron in Nutrition, Dietary Adaptations for Geographic and Racial Factors, Growth and Health in Relation to Nutrition, Psychological Factors in Nutrition.

The book is a veritable gold mine of information, giving in condensed form the best thought of many writers on the various phases of nutrition as applied especially to children. It may be considered a final authority upon our knowledge of what is best for the growth and development of the child.